

Claims:

1. A method of searching a multimedia document, said multimedia document comprising digital video data, said method comprising the steps of:
 - a) searching text data in a multimedia document according to a user-defined query, wherein said multimedia document has a hierarchical structure comprising a plurality of structural elements, and wherein at least one of said structural elements comprises text data; and
 - b) displaying to a user the result obtained in the performance of step (a).
2. A method of using digital video data to answer frequently asked questions displayed on a web page, said method comprising:
 - a) creating a multimedia document having a hierarchical structure, said multimedia document comprising a plurality of structural elements, wherein at least one of said structural elements contains digital video data;
 - b) displaying a web page containing frequently asked questions to a user;
 - c) receiving input from the user identifying a user-selected frequently asked question contained in said web page;
 - d) retrieving data from said multimedia document, said data associated with an answer to said user-selected frequently asked question; and
 - e) outputting data retrieved in step (d) to said user.
3. A method of publishing a multimedia document, said multimedia document comprising digital video data, /said method comprising the steps of:

- a) creating a movie from a multimedia document, said movie comprising a plurality of structural elements, said plurality of structural elements comprising a plurality of tracks, each of said plurality of tracks containing data from said multimedia document and timing information;
- b) processing said movie, wherein said processing step includes partitioning said movie into a plurality of movie components; and
- c) generating at least one output document in a web-based language, said output document capable of being processed by a web browser for viewing by a user, said output document permitting said user to receive output of at least one of said movie components as selected by said user.

4. The method as claimed in claim 3, wherein said web-based language is selected from the group consisting of: Hypertext Markup Language, Structured Multimedia Integration Language, and Wireless Markup Language.

5. The method as claimed in claim 3, wherein said method also comprises the step of selecting an output format for said movie, wherein said output format is selected from the group consisting of: QuickTime, AVI, Windows Media, and Real Media.

6. The method as claimed in claim 3, wherein said method also comprises the step of selecting at least one document template from a plurality of document templates for use in said generating step.

7. The method as claimed in claim 3, wherein said processing step also includes a compressing step wherein the data of at least one track of said plurality of tracks is compressed, and wherein said

method further comprises the step of decompressing the data of at least one track of the at least one of said movie components selected by said user.

8. The method as claimed in claim 7, wherein said compressing step includes selecting a compression algorithm from a plurality of compression algorithms for use in said compressing step.

9. The method as claimed in claim 7, wherein said compressing step includes determining an optimal compression algorithm for use in said compressing step.

10. The method as claimed in claim 3, wherein said method also comprises the step of connecting each of said plurality of movie components with an identifying element.

11. The method as claimed in claim 10, wherein said identifying element is a graphic capable of being viewed by said user.

12. The method as claimed in claim 3, wherein said method also comprises a document creating step, wherein a multimedia document having a hierarchical structure is created.

13. The method as claimed in claim 12, wherein said multimedia document represents a movie comprising a plurality of first structural elements, wherein each of said first structural elements comprises at least one of the following: a second structural element, a text element, and a content element.

14. The method as claimed in claim 12, wherein said document creating step is performed by a plurality of authors, wherein each author creates a part of said multimedia document.

15. The method as claimed in claim 3, wherein said multimedia document comprises a variant element for use in generating output documents from a multimedia document in a plurality of formats.

16. The method as claimed in claim 15, wherein said generating step uses said variant element to generate at least one output document in English, and at least one output document in French.

17. The method as claimed in claim 15, wherein said generating step uses said variant element to generate a plurality of output documents associated with one of: a plurality of operating system platforms, a plurality of data transfer rates, and a plurality of expertise levels.

18. The method as claimed in claim 3, wherein said method also comprises a delivering step wherein said at least one output document is transmitted to said user via a data communications network.

19. The method as claimed in claim 18, wherein said at least one output document consists of a single HTML page, said single HTML page comprising hypertext links for accessing output of at least one of said movie components.

20. A method of navigating a multimedia document, said multimedia document comprising digital video data, said method comprising the steps of:

- a) searching text data in a multimedia document, wherein said multimedia document has a hierarchical structure comprising a plurality of structural elements, and wherein at least one of said structural elements comprises text data;

- b) creating a navigation index comprising a plurality of index elements using said text data;
- c) retrieving data from said multimedia document, said data being associated with a user-selected index element; and
- d) outputting the data retrieved in c) to a user.

21. The method as claimed in claim 20, wherein the navigation index is selected from the group consisting of: an index, and a table of contents.

22. A method of updating a multimedia document, said multimedia document comprising digital video data, said multimedia document having a hierarchical structure comprising a plurality of structural elements, said method comprising the steps of:

- a) selecting a structural element in the multimedia document;
- b) retrieving data stored in the structural element selected in step a);
- c) amending said data retrieved in step b); and
- d) storing the data as amended in c) in the structural element selected in step a).

23. A system for publishing multimedia documents, said multimedia documents comprising digital video data, said system comprising:

- a) a first module for creating a movie from a multimedia document, said movie comprising a plurality of structural elements, said plurality of structural elements comprising a plurality of tracks, each of said plurality of tracks containing data from said multimedia document and timing information;

- b) a second module connected to said first module for processing said movie, wherein said movie is partitioned into a plurality of movie components;
- c) a third module connected to said second module for generating at least one output document in a web-based language; and
- d) a web browser connected to said third module for processing said output document and displaying said output document to a user, wherein said output document permits said user to receive output of at least one of said movie components selected by said user.

24. The system as claimed in claim 23, wherein said web-based language is selected from the group consisting of: Hypertext Markup Language, Structured Multimedia Integration Language, and Wireless Markup Language.

25. The system as claimed in claim 23, wherein said system also comprises a fourth module connected to said web browser, said fourth module used to transmit output of the at least one of said movie components to a user in a specified output format, wherein said output format is selected from the group consisting of: QuickTime, AVI, Windows Media, and Real Media.

26. The system as claimed in claim 23, wherein said third module generates said at least one output document using at least one document template selected from a plurality of document templates.

27. The system as claimed in claim 23, wherein said system also comprises a compression module for compressing the data of at least one track of said plurality of tracks, and wherein said system also

comprises a decompression module for decompressing compressed data.

28. The system as claimed in claim 23, wherein the processing performed by said second module also comprises connecting each of said plurality of movie components with an identifying element.

29. The system as claimed in claim 28, wherein said identifying element is a graphic capable of being viewed by said user.

30. The system as claimed in claim 23, wherein said system also comprises an application for creating a multimedia document, said multimedia document having a hierarchical structure.

31. The system as claimed in claim 30, wherein said multimedia document represents a movie comprising a plurality of first structural elements, wherein each of said first structural elements comprises at least one of the following: a second structural element, a text element, and a content element.

32. The system as claimed in claim 31, wherein said multimedia document comprises text data, wherein said system comprises a search module, and wherein said text data can be searched using said search module.

33. The system as claimed in claim 32, wherein said system comprises a database for storing text data which can be searched using user-defined queries.

34. The system as claimed in claim 30, wherein said application is adapted to permit each of a plurality of authors to create a part of said multimedia document.

35. The system as claimed in claim 30, wherein said multimedia document is a document containing frequently asked questions.

36. The system as claimed in claim 23, wherein said multimedia document comprises a variant element for use in generating output documents from a multimedia document in a plurality of formats.

37. The system as claimed in claim 36, wherein said variant element is used to generate at least one output document in English and at least one output document in French.

38. The system as claimed in claim 36, wherein said variant element permit generation of a plurality of output documents associated with one of: a plurality of operating system platforms, a plurality of data transfer rates, and a plurality of expertise levels.

39. The system as claimed in claim 23, wherein said system also comprises a module adapted to transmit said at least one output document to said user via a data communications network.

40. The system as claimed in claim 39, wherein said at least one output document consists of a single HTML page, said single HTML page comprising hypertext links for accessing output of at least one of said movie components.

41. The system as claimed in claim 23, further comprising: a module programmed to create a navigation index for processing text in said multimedia document, said navigation index comprising a plurality of index components; and a module programmed to retrieve data in said multimedia document associated with a user-selected index components of said navigation index, and to output said data to a user.

42. The system as claimed in claim 23, further comprising: a module programmed to retrieve data stored in a selected structural element of said multimedia document; and a module programmed to receive modifications to said data from a user, and saving the data as modified by said user in said selected structural element.

43. A computer-readable medium having stored thereon computer-executable instructions for publishing multimedia documents comprising digital video data by performing the steps of:

- a) creating a movie from a multimedia document, said movie comprising a plurality of structural elements, said plurality of structural elements comprising a plurality of tracks, each of said plurality of tracks containing data from said multimedia document and timing information;
- b) processing said movie, wherein said processing step includes partitioning said movie into a plurality of movie components; and
- c) generating at least one output document in a web-based language, said output document capable of being processed by a web browser for viewing by a user, said output document permitting said user to receive output of at least one of said movie components as selected by said user.